

24 September 2018

## **Initial Oil Certification for Utah**

Indago Energy Limited ("INK") announces that it has received its first oil certification for its new oil sands project in Utah.

An independent Contingent Oil Resources report has been prepared by Netherland Sewell & Associates Inc ("NSAI") dated 21 September 2018 for Indago's 100% owned Utah oil sands project.

NSAI estimate that the Contingent Oil Resources within the project are 12.4 million barrels of oil ("mmbbl") on a 2C basis, 6.2 mmbbls on a 1C basis and 24.8 mmbbls on a 3C basis from an Original Oil in Place ("OOIP") of 141.7 mmbbls as set out in the table below:

## Indago Utah Oil Sands Project

Best Estimate	Net (87.5%) Contingent Oil Resources (mmbl)*		
OOIP	Low Estimate	Best Estimate	High Estimate
(mmbl)	(1C)	(2C)	(3C)
141,7	6,2	12,4	24,8

\*The resources shown in this report are contingent upon demonstrating the efficiency and economics of HCD Multi-Flow® injection into the Duchesne River, Rim Rock and Asphalt Ridge sandstones of the Mesaverde Group and Indago Oil and Gas Inc.'s commitment to develop the properties. If these contingencies are successfully addressed, some portion of the contingent resources estimated in this report may be reclassified as reserves. The estimates in this report have been prepared in accordance with the definitions and guidelines set forth in the 2007 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE).

The contingent resources shown in this report have been estimated using deterministic methods. No petroleum reserves or prospective resources have been determined at this time. Once all contingencies have been successfully addressed, the approximate probability that the quantities of contingent resources actually recovered will equal or exceed the estimated amounts is generally inferred to be 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate. The estimates of contingent resources included herein have not been adjusted for any risk including for the possibility that the contingencies are not successfully addressed.



Commenting on the results, INK Chairman, Stephen Mitchell, stated "the initial Contingent Resource report confirms our internal analysis of a very substantial oil resource within our project area. Given the depth ranges of the resource, we will assess both mining the shallow resource and more conventional petroleum production methods for the deeper sands. In each case the use of our key product, HCD Multi-Flow, will be instrumental in the next stage of testing".



Figure 1. Indago's leasehold acreage. Note that there is a privately owned lease (grey) that is not part of INK's acreage.

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INK has now acquired a total of 3,459 acres including Section 22 (T4S R20E) where six wells drilled by previous operators provide detailed information on key aspects of the reservoir and oil. Results of more than 330 core samples taken from these six test wells were published on the Utah Geological Survey website and show that the target zone has a reported average porosity of 30.3%, average permeability of 524 millidarcies, oil saturation of 65.6% and an oil gravity of 10-14<sup>0</sup>API.

INK also observed that several operators have mined asphalt from the shallow Mesaverde Group to the east, southeast and northeast of INK's leased acreage with some asphalt mining having occurred within sections 23 & 24 of INK's newly acquired acreage. The information from previous operators has demonstrated an oil saturated reservoir approximately 90-175' (27-53 metres) thick at a depth range from surface outcrop down to ~3000' (914 metres).

Utilising existing data from earlier drilling and mining operations, INK will now determine the distribution of where the target zone is sufficiently shallow for bulk sampling by hand auger or backhoe excavation and design a series of tests to determine the effectiveness of its technology, HCD Multi-Flow, in liberating the oil from the sands. This test work is expected to include analysis of oil recovery rates at different Multi-Flow dosage rates.

Should this test prove successful, INK will then move to a more comprehensive bulk testing through existing third party test plant equipment and possibly down-hole production tests.

Initial testing costs are expected to be low given the shallow depth of the target sands.

INK will follow the testing phase with a larger appraisal programme aimed at determining the continuity, thickness and amount of oil saturation of the Rimrock Sandstone across INK's leased acreage. An important component of the programme will be to demonstrate whether or not the Multi-Flow technology can be used to extract oil economically via mining techniques and/or enable the crude to be lifted to surface with conventional oilfield equipment.





Figure 2. Photo of the Rimrock Sandstone (left) seeping heavy oil from an outcrop adjacent to INK's new lease acreage acquisition and photo of Asphalt Ridge (right).

The leases have a primary term of 10 years for an annual cost of US\$10 per acre per year. The acquisition costs were immaterial.

INK's upstream strategy has been to identify and acquire an interest in several upstream oil projects where its unique technology for reducing viscosity and pour point can be applied in order to develop its own reserves and cash flow. Should it be successful in this project, this will also demonstrate to other participants in the industry the commercial benefits of HCD Multi-Flow® and assist in generating additional product sales.

In addition to its upstream initiatives in North America, INK continues to aggressively pursue opportunities for product sales through its own staff in the US & Canada as well as via its distribution partners in the Middle East, South America and China.

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## **Qualification Statement**

The contingent resources stated herein are based on and fairly represents information and supporting documentation prepared by or under the supervision of John Hattner of NSAI who is a qualified petroleum reserves and resources evaluator within the meaning of the ASX Listing Rules. Mr Hattner has provided his written consent to the issue of this report in the form and context in which the contingent resources and the supporting information are presented in it.

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